

## CLAIMS

- 1) Mixing and extrusion machine for rubber-based and silicone-based plastic materials of the type comprising a dump extruder equipped with conical converging twin screws located in a  
5 batching chamber, characterised in that the outlet of said batching chamber is temporarily sealed by a removable blind flange, said batching chamber also acting as compounding chamber.
- 10 2) Machine as claimed in claim 1) characterised in that the front end of said conical screws (10) grazes said sealing blind flange (11).
- 15 3) Machine as claimed in claim 1) or claim 2), in which said batching chamber is sealable in an airtight manner to carry out the compounding process under vacuum.
- 4) Machine as claimed in claim 1), 2) or 3), in which said conical screws are counterrotating.
- 20 5) Compounding and extrusion method of a semifinished rubber-based or silicone-based plastic product, of the type comprising the step of extruding said semifinished product from a dump extruder equipped with two conical converging twin screws, characterised in that it further comprises the following prior steps:
  - applying onto the outlet of the dump extruder a blind flange that closes the outlet,
  - 25 - feeding the raw material to be compounded into the batching chamber of said conical screws,
  - starting the dump extruder for the time necessary to obtain a compounding of the raw material in said chamber,
  - removing said blind flange and continuing the operation  
30 of the dump extruder up to the extrusion of the compound.
- 6) Method as claimed in claim 5), characterised in that - after the step of introducing the raw material - the following further steps are carried out:
  - supplying a sealing cover over the opening where the raw  
35 material is introduced,
  - placing said batching chamber under vacuum for the whole mixing time.
- 7) Method as claimed in claim 5) or 6), in which - after removing said blind flange - a flange with an open drawing plate

of the desired shape is mounted.